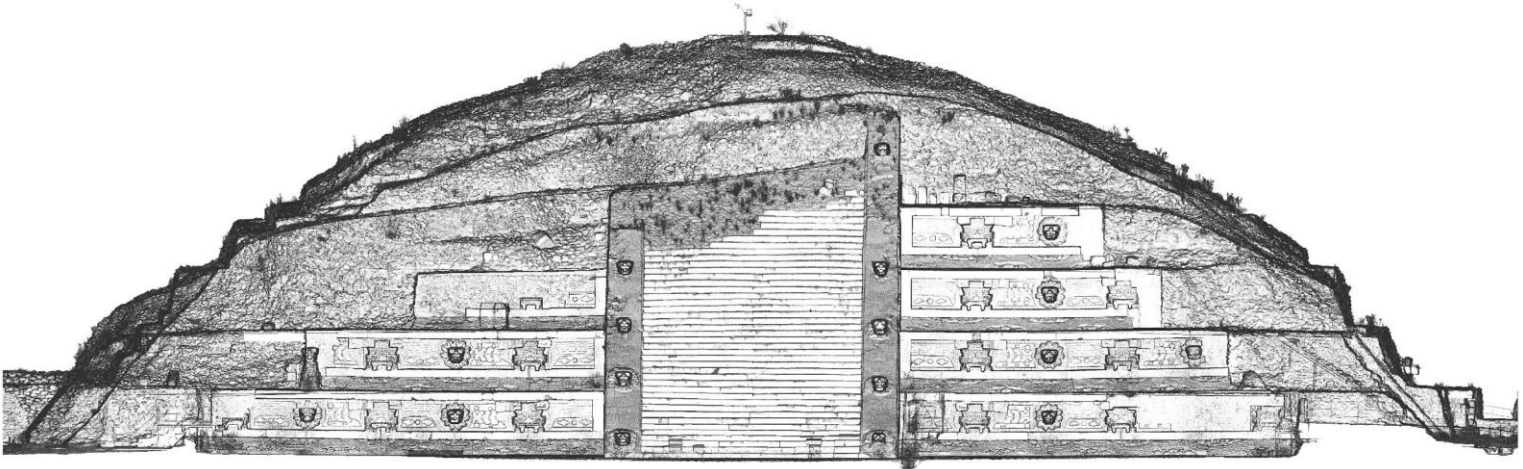


DESIGN OF THE COMPREHENSIVE PROTECTION SYSTEM FOR THE WEST FACADE OF THE PYRAMID OF THE PLUMED SERPENT, ARCHAEOLOGICAL SITE OF TEOTIHUACAN, STATE OF MEXICO.



International Contest

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INTRODUCTION

The ancient city of Teotihuacan was designated by UNESCO as World Heritage in 1988, which is the archeological site of Mexico that, at this moment receives the largest number of visitors, was the seat of the most influential and complex society that had existed in the Americas. It beginning dates from at least the third century Before Common Era. It reached their apogee period between 150 and 600 of Common Era; the city covered more than 23 square kilometers, with an estimated population of approximately 150.000 inhabitants. Teotihuacan expanded its connections to the present states of Jalisco and Zacatecas, also maintained relationship with cities located in Honduras, Belize and Guatemala in Central America.

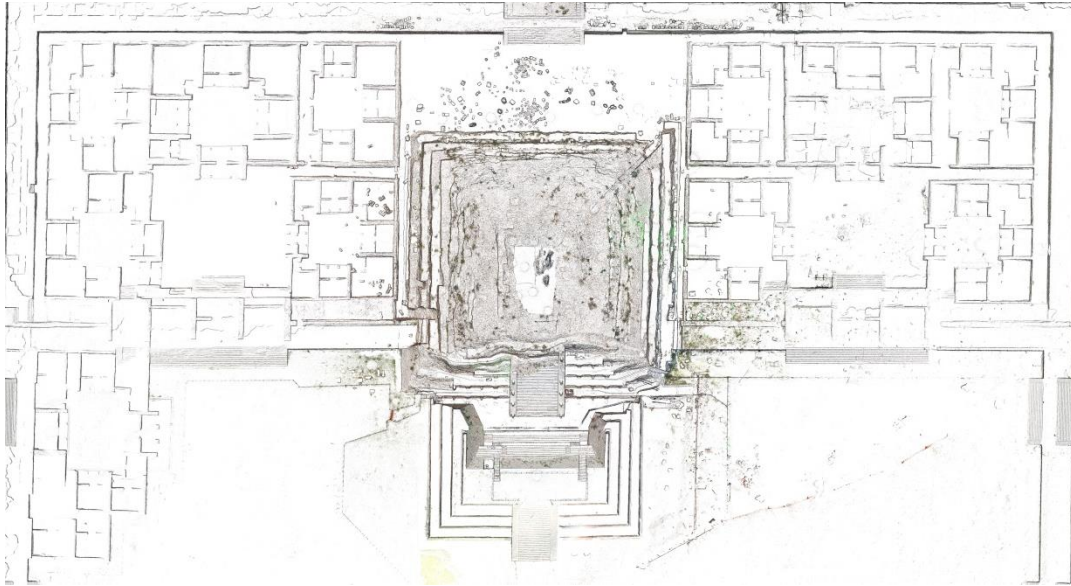
The city was comprised by more than two thousand architectural complexes and it was arranged in neighborhoods creating one of the greatest urban expressions of ancient world. The metropolis has three large architectural complexes: the Pyramid of the Moon, the Pyramid of the Sun and La Ciudadela. The Pyramid of the Plumed Serpent located at this last complex, is one of the most symbolic buildings of Teotihuacan and of all Ancient Mexico. Its strong symbolism is linked to fundamental concepts of cosmovision of ancient Mesoamerican groups, and the set of the elements that comprise this monument creates a complex unit of significance.

The excavation of this extraordinary architectural monument, one century ago, the environmental conditions which it has been exposed to, as well as the material properties which it was made of, are causing finishing and architectural decorative elements of monument be at risk.

In the last fifteen years, an accelerated and scarily process of deterioration, mainly caused by the noticeable daily oscillatory thermal and seasonal instability, the rain and unseasonal storms, the solar radiation, among others has been observed. The above-mentioned reasons have impacted by different mechanisms the building causing severe damages to those sculptures built-in the facade.

In consideration of the above mentioned, preserving the building is one of the greatest challenges and commitments of The National Institute of Anthropology and History (by its initials in Spanish, INAH), who has taken measures to mitigate some of the main causes of deterioration. Works to return the original floors, renovation of drainage system, among others, were performed in order to prevent the water will not accumulate around the monument.

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Nevertheless, the effects of climate change and the accumulated deterioration of materials require us to take greater impact and long-term measures.

For this reason, the Secretariat of Culture through The National Institute of Anthropology and History calls for this International Contest: **Design of the Comprehensive Protection System for the West Facade of the Pyramid of Plumed Serpent, Archeological Site of Teotihuacan, State of Mexico.**

I. GENERAL OBJECTIVE

Develop an architectural project consisting of an integral protection system intended to support conservation of the Pyramid of the Plumed Serpent, stabilize the archaeological monument and cushion root causes of deterioration that mostly had affected the west facade of monument. Through an academic, chartered and interdisciplinary process of evaluation, the project must neutralize all deterioration causes associated with climatic conditions in accordance with current laws on construction and structural security stressing the compliance with the national and international regulations regarding preservation of cultural heritage.

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II. CONTEST RULES

FIRST. Mexican or foreign architects or civil engineers with Mexican professional license or its equivalent foreign document stating they are authorized to act as professional architect or civil engineer will be allowed to participate; the single or collective, or through interdisciplinary groups participation is allowed. Furthermore, legal entities whose business purpose is developed in architecture and civil engineering field will be allowed to participate.

The number of members or co-workers that form a group of professionals is not limited, but the group should designate one or at least three project owners who must be an architect or engineer in accordance with that set forth in the preceding paragraph.

SECOND. Each individual or collective contestant, as project owner or co-worker, could only participate in one project.

THIRD. The Contest will be developed in three phases: registration, preparation of draft project and elaboration of architectural project. The contestants in due time and course must comply with the specified procedures and requirements of each phase, which are detailed on Appendix III of this Contest. Failure to comply with procedures or requirements will cause disqualification.

FOURTH. Submission of project materials will be performed at the offices of INAH National Coordination of Archeology located at Córdoba 45, Col. Roma, C.P. 06700, Alcaldía Cuauhtémoc, Mexico City from 9 am. to 4 pm on the date herein below specified:

- A. Submission of registration application: from October 4th to 8th, 2021.
- B. Submission of draft projects: February 21st, 2022.
- C. Submission of architectural projects: August 15th, 2022.

The contestants will be responsible for submission of project materials. Hence, if project materials are not personally submitted, the contestants will use the necessary ways and means to fulfill the provisions set forth on contest rules.

FIFTH. The Jury will be made up of prominent recognized Architecture, Engineering, Archeology and Preservation specialists. The Jury will be responsible for selection of three finalist draft projects that will be included into stage of elaboration of Architectural Project, as well as to select the winning project among them.

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SIXTH. The Jury reserves the right to declare void the Contest.

SEVENTH. Upon Jury's decisions are taken, the decisions could not be revoked or subjected to appeal.

EIGHT. The decision of this Contest, as well as all information related to delivery of prizes will be informed and published on September 6th, 2022 on National Institute of Anthropology and History's website: www.gob.mx/cultura/inah

III. PROCEDURES AND REQUIREMENTS

REGISTRATION OF CONTESTANTS

A. Applications for registration of contestant will be submitted from October 4th to 8th, 2021, and for this purpose the following documents must be submitted in printed format and PDF file (DVD or flash drive):

- a) Pre-registration form of Contest, which will be available on this web site www.gob.mx/cultura/inah as of September 27th, 2021, signed and duly filled-out.
- b) Legible copy supporting academic degree of project owner (or project owners) of proposal.
- c) Legible copy of professional license of project owner (or project owners) of proposal or equivalent international document.
- d) Legible copy of Articles of Incorporation when contestant is a legal entity.
- e) Executive summary of business activities of project owner or group project owners or legal entity.
- f) Documentary evidence supporting at least 8 years of experience in design and performance of architectural projects.
- g) Letter of engagement signed by contestant whereby contestant agree to take part in the elaboration of Architectural Project, in the event the contestant should be selected as finalist of draft project phase, and have qualifications to carry out the architectural project.
- h) Confidentiality agreement form regarding manage and use of information provided by The National Institute of Anthropology and History under the present Contest, which will be available on this

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website www.gob.mx/cultura/inah as of the date of Contest publication, signed and duly filled-out.

- i) Letter signed by project owner or project owners whereby the rights of its or their draft project are assigned to and if applicable, the rights of architectural project, in order to said projects will be part of the INAH's documental and historical archival collections and INAH could partially or completely use for the executive project and when appropriate the execution of works, as well as to be disclosed or published. INAH will acknowledge authorship and give the relevant credit to authors at all times.

B. Workers attached to INAH or any individual who have entered into a professional services or employment contract with INAH are NOT allowed to participate in this Contest, including third-degree relatives of said workers or individuals.

C. Upon submission of project materials, a CONTESTANT CODE will be assigned. Throughout Contest, it will be used as contestant and project identification until decision will be taken and files with information of contestant are opened.

D. Once the term for registration is concluded, requirements compliance will be confirmed and e-mail validating registration will be sent on October 25th, 2021 or by e-mail will be informed that your registration application is rejected due to requirements were not fulfilled. Once the decision regarding to non-compliance of requirements is taken, no disagreement related to will apply.

OPEN PHASE. PREPARATION OF DRAFT PROJECT

A. All participants whose registration was validated are required to attend a site visit which will be conducted by INAH's specialists in order to present information about the situation and project scope and questions of contestants will be answered. Additionally, documents intended for preparation of draft project which are specified on the complementary documents attached hereto as APPENDIX I, II and III will be delivered. The e-mail that validates your registration as participant will inform you the date and time of the site visit.

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- B.** When draft project is prepared, contestants must follow specifications stated on the complementary document attached to this Contest as APPENDIX IV.
- C.** Reception of performed draft projects will be on February 21st, 2022.
- D.** The Jury will examine the draft projects received and select three finalist who will participate in the elaboration of Architectural Project phase. By e-mail, finalists will be informed thereof on April 25, 2022.
- E.** The jury, in its sole discretion, will confer any amount of honorable mentions.

CLOSE PHASE. ELABORATION OF ARCHITECTURAL PROJECT

- A.** The finalists of draft project phase and the Jury will get together in order to finalists present the project, questions be answers and, if applicable, remarks are given. The date and time of meeting will be informed to each finalist by e-mail.
- B.** Contestants must follow specifications stated on the complementary document attached to this Contest as APPENDIX V.
- C.** Architectural projects will be received on August 15th, 2022.
- D.** The Jury will evaluate the architectural projects and will select the winner who will be awarded MXN\$600,000.00 (six hundred thousand Mexican pesos) as a prize. The other two finalist projects will receive each one a prize of MXN\$300,000.00 (three hundred thousand pesos).
- E.** Evaluation of proposals will be made by a scoring system and final decision will be announced on September 22nd, 2022 on The National Institute of Anthropology and History's website: www.gob.mx/cultura/inah. Winners will be informed by the Institute the location where prizes will be delivered.

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IV. TIMETABLE

Publication of contest	August 2nd, 2021
Registration of contestants	From October 4th to 8th, 2021
Confirmation of registration	October 25th, 2021
Site visiting, exhibition of problem, clarifying meeting and project material delivery	From November 8th to 10th, 2021
Reception of Draft Projects	February 21st, 2022
The three finalists of Draft project phase are informed	April 25 th, 2022
Meetings of finalists and the Jury	From May 2nd to 6th, 2022
Reception of Architectural Projects	August 15th, 2022

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Announcement of decision

September 6th, 2022

Delivery of Prizes

September 20th, 2022

All dates are subject to change at any time without prior notice as a result of force majeure.

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APPENDIXES

All information related to Annex I, II and III will be delivered in digital format by INAH at site visit.

Contestants must submit draft projects and architectural projects accordingly with that set forth on Appendix IV and V.

APPENDIX I. FOLDER WITH BASIC REFERENCE DATA OF MONUMENTS

- Bibliography regarding general architectural space data (location, temporality, characteristics, dimensions, construction system, type of materials of the Pyramid of the Plumed Serpent and the Tiered Platform), as well as the cultural meaning of archaeological monuments and their environment, the archeological interventions and the preservation problems.

APPENDIX II. SPECIFIC DRAWINGS OF THE MONUMENT AND ITS ENVIRONMENT

- Topographic map of La Ciudadela.
- Drawings of monuments are intended to protect (the Pyramid of the Plumed Serpent and Tiered Platform).

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APPENDIX III. CONSIDERATIONS FOR PROTECTION DESIGN

1. Protection design should seek to achieve maximum efficiency in order to completely protect the west facade in its entirety and also part of the half western side of the pyramid, from extreme weather events that are causing their deterioration.
2. Ensuring durability of protection system using high quality, long-lasting materials in order to guarantee long-term resistance to weather conditions of site.
3. That the materials used could be evidently differentiated from those materials of pre-hispanic monument.
4. The protection design will have a low-cost and low environmental impact maintenance program.
5. An appropriate and non-intrusive visual environment should be created for both, the complex and the site, in order to indoor space help to observe all elements of facade.
6. The design must be adapted to the architecture of pre-hispanic buildings in order to preserve visual appreciations of buildings.
7. The design should anticipate any structural alteration may occur as consequence of dead loads (permanent load or gross weight of structure) and the impact of live loads caused by rain water, accumulated hail and pedestrian circulation.
8. It should be minimized the short, medium, and long-term structural alterations caused by weight, anchorage, installation of brackets, columns, etc., to Tiered Platform and also to Pyramid based on technical studies may be required.
9. Strong gusts of wind may be considered into.
10. In order to anticipate highly rainfall during rainy season, an appropriate and control design to convey rain runoff to drainage system will be designed.

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11. The space between both buildings should promote an appropriate microclimate with lighting and preferably natural ventilation.
12. It will include a proposal for artificial lighting system which will be based on renewable energy power system.
13. In order to make use of indoor space for multimedia projections, a proposal should be included for this purpose.
14. Protection design will promote the appropriate flow of visitors and accessibility for persons with disabilities and elderly population.

APPENDIX IV. OPEN PHASE. DRAFT PROJECT

Draft projects will be physically submitted at the offices of INAH's National Coordination of Archaeology located at Córdoba 45, Col. Roma, CP 06700, Alcaldía Cuauhtémoc, Mexico City on February 21st, 2022 from 9 am to 4 pm. Physical on-site presence of participant is not required. All document deliverables must be numbered and include the assigned contestant's code in order to each participant will be properly identified. All document deliverables, therefore, will be compared when submission is performed. Letterhead or personal data that may disclose contestant's identity must not be included in the required project materials (documents, drawings, models, 3D, etc.).

For submission, draft project will be put into an envelope which will show a white label placed at the right upper end of envelope's front reading **Draft project** and Contestant's Code. This envelope will contain a DVD or flash drive with project information in digital format. The digital file for documents will be a PDF file, for drawings a DWG and PDF file, and for 3D Models a DWG and MAYA file containing at least the following:

- Floor plans drawing with structural criterion.
- Roof plan.

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- Eight longitudinal sections.
- Eight cross sections.
- Eight facades.
- Four three-dimensional representations in 3D Models.
- One interior render and one exterior render of project.
- Any detail construction drawing the contestant may deem convenient to complement the explanation and development of his proposal.

It should be pointed out that all drawings, views and 3D models submitted must include the archeological profile of monument.

In order to understand the project's idea, the contestant could write a text on drawings.

A printed set of each drawing will be also submitted in ledger format size.

In addition, the **Design Brief of project** will be submitted in PDF file and printed on letter size bond paper including the following information:

- Creative concept.
- Theoretical rationale.
- Detailed description of proposal.
- Visual integration of proposal regarding the monument and complex
- Criteria used for materials selection.
- Criteria used for selection of construction system which should pay close attention to contact bracket placed between the floor and the proposed protection roof and foundation thereof.
- The behavior of the proposed structure during earthquakes, wind, hail, minimum and maximum sun exposure should include an analysis of the

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angle of extreme rain fall and rain runoff, as well as the complete proposal for collection and management of water.

- o Criteria for proposal used for artificial lighting.
- o General guidelines of low environmental impact maintenance program.
- o General guidelines of risk map, in the event a fire and/or disaster may occur.
- o Criteria for accessibility and flow of persons with disabilities.
- o Cost estimate of work completed should be itemized.

This list includes, but is not limited to all aspects may be incorporated into the Design Brief. All information deem convenient to explain in detail the proposal could be included.

APPENDIX V. CLOSE PHASE ARCHITECTURAL PROJECT

The architectural projects must be physically submitted at the offices of INAH's National Coordination of Archaeology located at Córdoba 45, Col. Roma, CP 06700, Alcaldía Cuauhtémoc, Mexico City on August 15th, 2022 from 9 am to 4 pm. Physical on-site presence of participant is not required. Contestant must numbered all pages due to they will be compared when submission is performed. Any letterhead or personal data that may disclose contestant's identity must not be included in the required project materials (documents, drawings, 3D models, etc.).

For submission, Architectural Project will be put into an envelope which will show a white label placed at the right upper end of envelope's front reading Architectural Project and Contestant's Code. This envelope will contain a DVD or flash drive with project information in digital format. The digital file for documents will be a PDF file, for drawings

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a DWG and PDF file, and for 3D Models a DWG and MAYA file containing at least the following:

- The architectural project and Design Brief will comply with the required scopes and specifications set forth for the Open Phase, and if suggestions have been made by the Jury, they must be updated. Additionally to that above-mentioned:
- Structural project
 - Detailed plans of construction system.
 - Eight longitudinal sections.
 - Eight cross sections.
 - Twelve sections for each façade.
 - Detail construction.
- Static and dynamic structural calculation memory.
- The three-dimensional (3D) model and the interior and exterior render which should include the adjustments suggested by Jury.
- Project for rainwater drainage with calculation memory.
- Project for lighting system with calculation memory.
- Specification, data sheets or references of all construction materials included on protection proposal.
- Quantification of estimated materials, budget and construction schedule.
- Maintenance manual.

Additionally, a printed set of each drawing will be submitted in ledger format size. All document deliverables must be numbered and include the assigned contestant's code in order to each participant will be properly identified.

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APPENDIX VI. GROUNDS FOR DISQUALIFICATION

- If complete information required by this Contest is not submitted in due time and course.
- In the event, the forms and specifications used to submit the information are different than those specified on Contest Rules.
- If personal data that may disclose contestant's identity is provided in the required project materials (documents, drawings, 3D model, etc.) that belong to Draft project or Architectural Project.
- If it is proved by Contest that the project is not partially or completely original or unpublished.
- If the digital information provided by the National Institute of Anthropology and History is distributed, used or modify for other purposes than enter into this Contest.
- If partially or completely malicious modification is made to the digital information provided by the National Institute of Anthropology and History for elaboration of draft project and/or architectural project purposes under this International Contest.
- If site visit is not attended on the specified date and time.
- If on the specified day and time to present the proposal project before the Jury, the contestant may not show up.
- Try to or make contact with any member of Jury to obtain or provide information about this Contest.